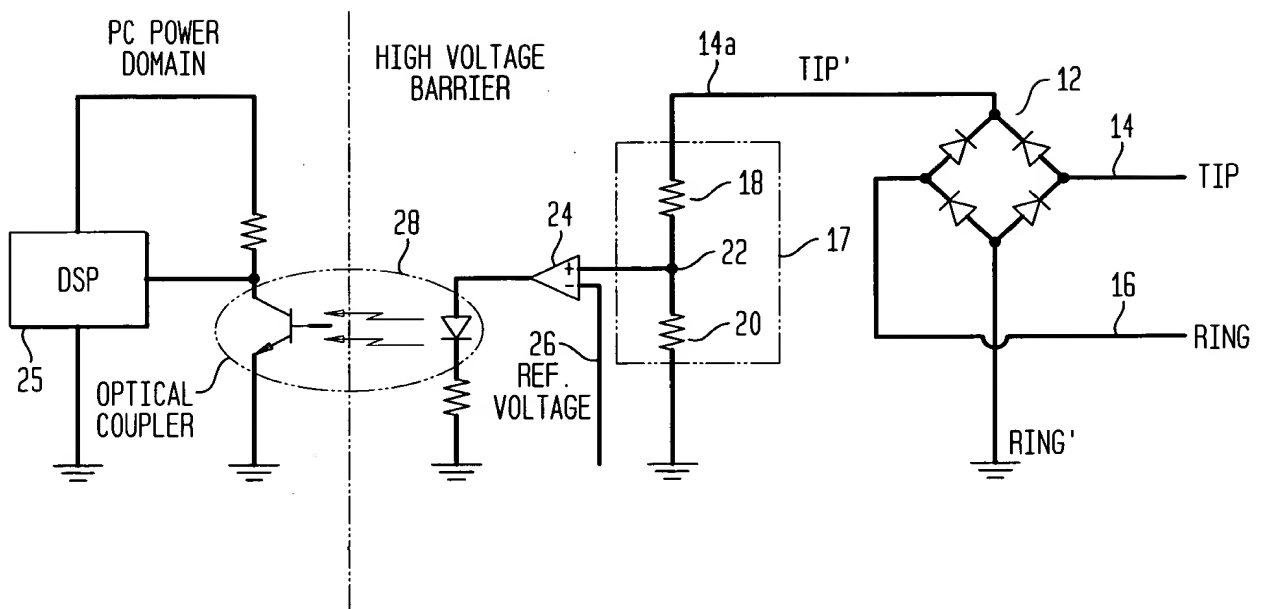


**FIG. 1**  
(PRIOR ART)



**FIG. 2**

The diagram shows a differential signal processing circuit. A Digital Signal Processor (DSP) block 25 is connected to a Low Power A/D Converter block 36. The A/D converter has two inputs, labeled C1 and C2, which are connected to a differential pair of transistors 01. The gates of these transistors are connected to a common-mode feedback network consisting of a resistor R1 and a bridge rectifier BR1. The rectifier BR1 has four inputs: two from the signal lines TIP and RING (labeled 14 and 16), and two from the feedback lines TIP' and RING'. The outputs of the differential pair 01 are connected to a resistor R2, which is then connected to a diode D1. The output of the diode D1 is labeled 40 and is connected to 'TO EXISTING BIT OUTPUT CONTROLS'. The entire circuit is enclosed in a dashed box labeled 30, which is grounded at the bottom.

[illegible]

FIG. 4

